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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,269	03/03/2004	Hyun-Jei Chung	SDIYPL.386AUS	8941

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KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER	
HODGE, ROBERT W	

ART UNIT	PAPER NUMBER
1729	

NOTIFICATION DATE	DELIVERY MODE
10/15/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
efiling@kmob.com
eOAPilot@kmob.com

Office Action Summary	Application No.	Applicant(s)	
	10/791,269	CHUNG ET AL.	
	Examiner	Art Unit	
	ROBERT HODGE	1729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 August 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,8 and 19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,8 and 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/26/10 has been entered.

Response to Arguments

Applicant's arguments filed 8/26/10 have been fully considered but they are not persuasive. With respect to applicants' arguments regarding the newly added claim limitations, the amendments to the claims will be addressed in the grounds of rejection below. With regards to applicants' reiterative arguments that have been addressed several times by the Examiner in previous office actions, said arguments are not persuasive for reasons already made of record.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

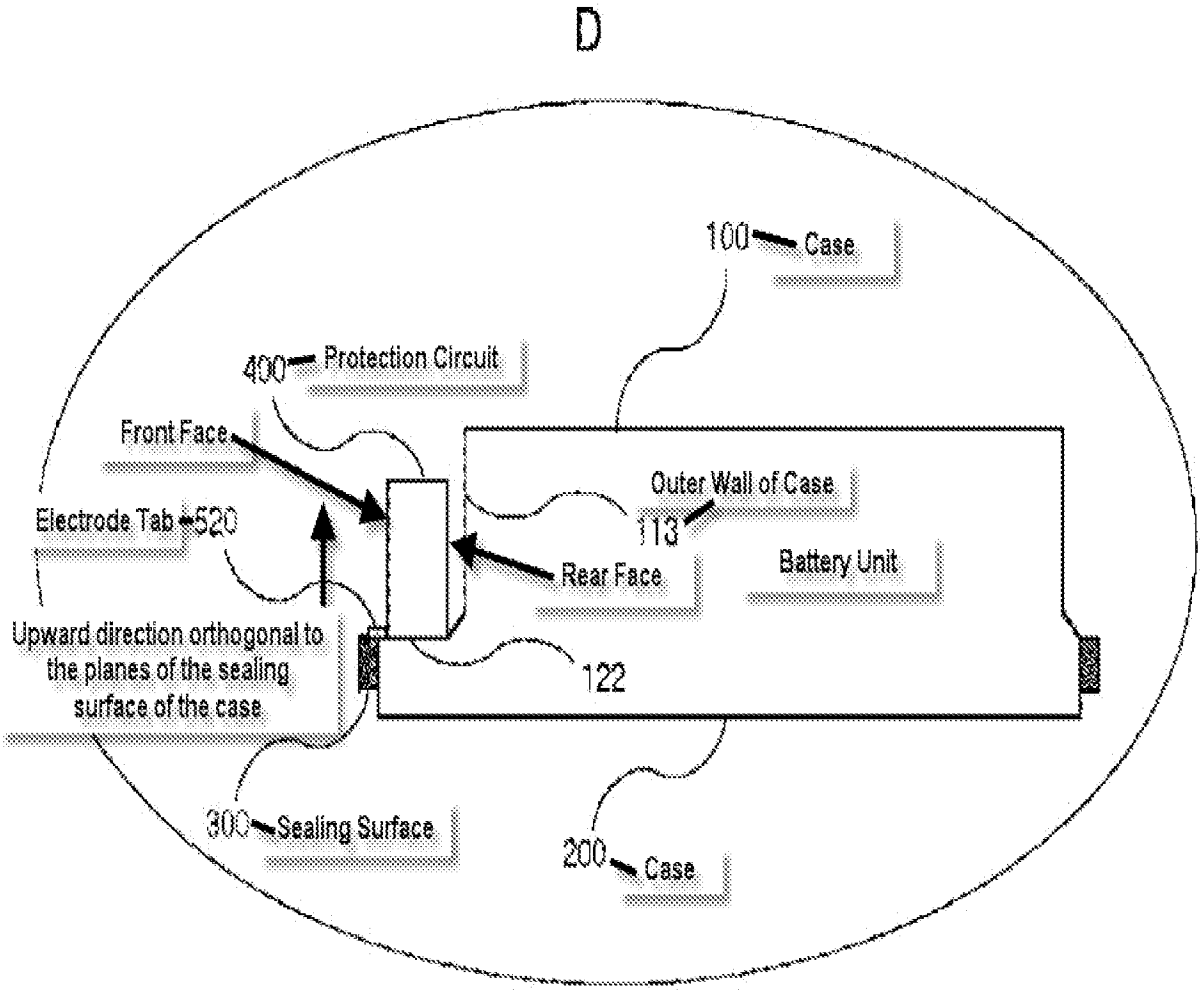
Claims 1, 2 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by KR 2002-0074550 hereinafter Jeong.

As seen in the cross-section D of figure 4 Jeong teaches a pouch-type lithium secondary battery comprising: a battery unit comprising: a positive electrode plate, a separator, and a negative electrode plate, wherein the separator is disposed between the positive and negative electrode plates; electrode tabs 510 and 520 extending from the positive and negative electrode plates of the battery unit; a case 100 and 200 having a space to accommodate the battery unit and a sealing surface 300 formed along the periphery of the space, a protection circuit board 400 having a front surface and an opposing rear surface and comprising electrode terminals disposed on the front surface, which are directly connected to the electrode tabs which extend through the case and are bent only once at a substantially right angle with respect to the planes of the sealing surfaces at a predetermined length in a thickness direction of the case without extending beyond a thickness of the case, wherein the protection circuit board is disposed between an outer wall of the case and the bent electrode tabs, wherein the electrode tabs are disposed parallel to the outer wall of the case in an upright position and are perpendicular to a contact surface at which the sealing surface is contacted and the electrode tabs connect to the protection circuit board on a side opposite to the outer wall of the case (pages 4 and 5 of the provided English machine translation and as illustrated below). Furthermore as seen in figures 1-3 and described on pages 4 & 5, Jeong teaches an upper case body 100 and a lower case body 200 that are joined together at a sealing surface disposed along the periphery of the space formed there between and are sealed along said periphery by a resin 300 having superior chemical resistance to the battery electrolyte which is inserted into a gap formed between the

upper and lower bodies to seal the upper and lower bodies to each other to prevent electrolyte from leaking out of the battery. Furthermore in the sixth full paragraph on page 5 it states:

> Referring to Figure 4, the protection circuit box (400) connected to the electrode terminal is installed in the space generated with the outer side of the lower part (122) of the outer side of the side wall (113) of the first area (110) of the can (100) and the second part (120). At this time, the protection circuit box (400) is adamantly installed at the lower part (122) of the second part (120) of the side wall (113) of the first area (110) of the can (100) or the can (100). In this way, with reducing the volume of the battery software in which the protection circuit is adhered and which is manufactured by setting up the protection circuit box (400) in the space generated with the outer side of the lower part (122) of the outer side of the side wall (113) of the first area (110) of the can (100) and the second part (120),, the energy storage density per volume as the battery software state is improved.

As clearly shown above there is in fact a protection circuit box that is connected to the electrode terminals and therefore because it is connected to the terminals it inherently has to have terminals otherwise the protection circuit would not function and neither would the battery. Therefore because the electrode terminals are extending away from the sealing surface 300 in a “vertical" direction with respect to the sealing surface, and the protection circuit is connected to the terminals, Jeong reads on claim 1 as recited.



Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants' Admitted Prior Art hereinafter AAPA.

As seen in figures 1 and 2 and described in paragraphs [0003]-[0015] of the instant specification, AAPA teaches a pouch type lithium secondary battery 10 comprising a battery unit 11 comprising a positive electrode plate 13, a negative

electrode plate 14, a separator 15 disposed between the positive and negative electrode plates, electrode tabs 16 and 17 extending from the respective positive and negative electrode plates, a case 12, comprising upper and lower case bodies that form a space 12a to accommodate the battery unit, a sealing surface 12b along the periphery of the space joining the upper and lower case bodies together, a protection circuit board 100 having a front and rear surface with electrode terminals 101 and 102 that are directly electrically connected to the electrode tabs, the protection circuit board is disposed in an approximately upward position with respect to the planes of the sealing surface of the case such that the rear surface faces the battery unit and the front surface faces away from the battery unit, wherein portions of each of the electrode tabs extend outside the case and are bent in an upward position with respect to a plane of the sealing surface, wherein the electrode tabs are bent at a predetermined length from a leading edge of the sealing surface in a thickness direction of the case, the electrode tabs further comprise insulating tape 18 between the electrode tabs and the sealing surface such that the insulating tape is wrapped around the portions of the electrode tabs bent from a leading edge of the sealing surface.

AAPA teaches the claimed invention except for bending the electrode tabs only once at a substantially right angle. It is noted that the orientation of the tabs will not effect the operation of the battery as a whole because the tabs will still be connected to the protection circuit board regardless of how they are bent and therefore it would have been obvious to one having ordinary skill in the art to bend the tabs only once at a

substantially right angle since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong as applied to claim 1 above, and further in view of Applicants' Admitted Prior Art hereinafter AAPA.

Jeong does not teach insulating tape around the electrode tabs.

AAPA as discussed above is incorporated herein.

At the time of the invention it would have been obvious to one having ordinary skill in the art to wrap insulating tape around the electrode tabs of Jeong as taught by AAPA in order to increase the sealing efficiency of the battery. If a technique has been used to improve one device (wrapping insulating tape around the electrode tabs), and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way (increasing the sealing efficiency of the battery), using the technique is obvious unless its actual application is beyond his or her skill. See MPEP 2141 (III) Rationale C, KSR v. Teleflex (Supreme Court 2007).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT HODGE whose telephone number is (571)272-2097. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ula Ruddock can be reached on (571) 272-1481. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert Hodge/
Primary Examiner, Art Unit 1729